

## FIGURE 1

CGGACGCGTGGGACCCATACTTGCTGGTCTGATCCATGCACAAGGCGGGCTGCTAGGCCTC  
TGTGCCCGGCTTGGAATTCGCTGCGGATGGCCAGCTCCGGGATGACCCGCGGGACCCGCT  
CGCAAATAAGGTGGCCCTGGTAACGGCCTCCACCGACGGGATCGGCTTCGCCATCGCCCGGC  
GTTTGGCCCAGGACGGGGCCATGTGGTCGTCAGCAGCCGAAGCAGCAGAATGTGGACCAG  
GCGGTGGCCACGCTGCAGGGGGAGGGGCTGAGCGTGACGGGCACCGTGTGCCATGTGGGGAA  
GGCGGAGGACCGGGAGCGGCTGGTGGCCACGGCTGTGAAGCTTCATGGAGGTATCGATATCC  
TAGTCTCCAATGCTGCTGTCAACCTTTTCTTTGGAAGCATAATGGATGTCACTGAGGAGGTG  
TGGGACAAGACTCTGGACATTAATGTGAAGSCCCAGCCCTGATGACAAAGGCAGTGGTGCC  
AGAAATGGAGAAAACGAGGAGGCGGCTCAGTGGTGATCGTGTCTTCCATAGCAGCCTTCAGTC  
CATCTCCTGGCTTCAGTCCTTACAATGTCAGTAAAACAGCCTTGCTGGGCCTGACCAAGACC  
CTGGCCATAGAGCTGGCCCCAAGGAACATTAGGGTGAACTGCCTAGCACCTGGACTTATCAA  
GACTAGCTTCAGCAGGATGCTCTGGATGGACAAGGAAAAAGAGGAAAGCATGAAAGAAACCC  
TGCGGATAAGAAGGTTAGGCGAGCCAGAGGATTGTGCTGGCATCGTGTCTTTCTCTGTGCTCT  
GAAGATGCCAGCTACATCACTGGGGAAACAGTGGTGGTGGGTGGAGGAACCCCGTCCCGCCT  
CTGAGGACCGGGAGACAGCCACAGGCCAGAGTTGGGCTCTAGCTCCTGGTGCTGTTCTCTGC  
ATTACCCCACTGGCCTTTCCACCTCTGCTCACCTTACTGTTACCTCATCAATCAGTTCT  
GCCCTGTGAAAAGATCCAGCCTTCCCTGCCGTCAAGGTGGCGTCTTACTCGGGATTCTGTCT  
GTTGTTGTGGCCTTGGGTAAGGCCTCCCTGAGAACAACAGGACAGGCCTGCTGACAAGGCT  
GAGTCTACCTTGGAAGACCAAGATATTTTCTCTGGGCCACTGGTGAATCTGAGGGGTGA  
TGGGAGAGAAGGAACCTGGAGTGGAAGGAGCAGAGTTGCAAATTAACAGCTTGCAAATGAGG  
TGCAAATAAAATGCAGATGATTGCGCGGCTTTGAAAAAAAAA

## **FIGURE 2**

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></usr/seqdb2/sst/DNA/Dnaseqs.min/ss.DNA35672
><subunit 1 of 1, 278 aa, 1 stop
><MW: 29537, pI: 8.97, NX(S/T): 1
MHKAGLLGLCARAWNSVRMASSGMTRRDPLANKVALVTASTDGIGFAIARRLAQDGAHVVS
SRKQQNVDQAVATLQGEGLSVTGTVCHVGKAEDRERLVATAVKLHGGIDILVSNAAVNPFPG
SIMDVTEEVWDKTL DINVKAPALMTKAVVPEMEKRGGSVVIVSSIAAFSPSPGFS PYNVSK
TALLGLTKTLAIELAPRNIRVNCLAPGLIKTSFSRMLWMDKEEESMKETLRIRRLGEPEDC
AGIVSFLCSEDASYITGETVVVGGGTPSRL
```

### **Important features of the protein:**

#### **Signal peptide:**

amino acids 1-15

#### **N-glycosylation site.**

amino acids 183-186

#### **N-myristoylation sites.**

amino acids 43-48, 80-85, 191-196, 213-218, 272-277

#### **Microbodies C-terminal targeting signal.**

amino acids 276-278

## FIGURE 3

GCGCCCTGAGCTCCGCCCTCCGGGCCGATAGCGGCATCGAGAGCGCCTCCGTGAGGACACGGCGGGC  
 CAGGGGGCCGGGGGGCAAGGAGGATGAGGGGGCCAGCAGCTGCTGACCTGCAGAACCAGGTGGC  
 GCGGCTGGAGGAGGAGAACCGAGACTTTCTGGCTGCGCTGGAGGACGCCATGGAGCAGTACAACTGC  
 AGAGCGACCGGGCTGCGTGAGCAGCAGGAGGAGATGGTGGAACTCGCGCTGCGGTTAGAGCTGGTGCGG  
 CCAGCTGGGGGGGGCTGCGGCTCTGAAATGGCCTGGCTCCCGGCTCCTTTGTGCTGCAGCTCATAC  
 AGCCCCCTGGGGGGTGCCACGCCCATGTGCTGGGCATGGTGCCGCTGCTGCTCCTTGGAGATG  
 AAGTTGGCTCTGAGCAGAGGGGAGAGCAGGTGACAAATGGCAGGGAGGCTGGAGCTGAGTTGCTGACT  
 GAGGTGAACAGGCTGGGAAGTGGCTCTTCACTGCTTCAGAGGAGGAAGGAGGAGGAGGAGCGCC  
 CAGCGGACCTTACACTGCGCAGAAATAGGATCAGCAACTGCAGTCAGAGGGCGGGGGCAGCGCCAG  
 GGAGTCTGCCAGAGAGGAAGGGCCAGAGCTTTGCCCTTGAGGAGTTGGATGCGAGCCATTCAGGGTCC  
 AGAGCAGTTGGTGGGAGCAAGGCCGAGTTTCAGGCCCGCCAGGTCCCCCCCTGCCACAGCCTCAGAGTG  
 CGGGCTGGCCAGGCCAGCAGCAGAGATCCGGGAGCTGGCTATCAACATCCGCATGAAGGAGGAGCTTA  
 TTGGCAGCTGGTCCGCAGAGAAAGGCAGCTCAGGCCCTGAACCGCCAGCAGCAGCCAGCGTATCCGG  
 GAGCTGGAGCAGGAGGCAGAGCAGGTGCGGGCCGAGCTGAGTGAAGGCCAGAGGCAGCTGCGGGAGCT  
 CGAGGCCAAGGAGCTCCAGGATGCTGGCGAGCGGCTCGGGTCCAGGAGTTCCCGCAGGAGGGTGGCTG  
 CGGCCAGAGCCAGGTGAGGCTGCTGAAGGAGAAGAAGCAGGCTCGGAGCGGCTGGTGTCTACTGTGCG  
 GCCCAGAGTGAGAAGCGACTGCAGGAGCTCGAGCGGAACGTGCAGCTCATGCGGCAGCAGCAGGGACA  
 GCTCGCAGAGGCGGCTTCGCGAGGAGACGGAGCAGAAAGCGCGCCTGGAGCGAGAAATGAGCAGCGGC  
 AGCACCGCGTCAAGGAGCTGGAGCTGAAGCATGAGCAACAGCAGCAGAGATCTGAGATTAAGACGGAA  
 GAGATCGCGGCCCTTCAGAGGAAGAGGCGCAGTGGCAGCAACGGCTCTGTGGTGCAGCTTGAACAGCA  
 GCGAAGATTGAGGAGCAGAAGAAGTGGCTGGACAGGAGATGGAGAAGGTGCTACAGCAGCGCGGG  
 CGCTGGGAGGAGCTGGGGGAGGCTCCACAAGCGGAGGCCATCTGGCCAGAGAGGAGGCCCTGTATG  
 CAGGAGAAGACGGGGCTGGAGAGCAAGCGCCTGAGATCCAGCCAGGCCCTCAACAGGAGCATCGTGGC  
 AGTGTCCAGCCGCTGGAGCACCTGGAGAAGGAGCTGTCCGAGAAGAGCGGGCAGCTGCGGCAGGGCA  
 GCGCCCAGAGCCAGCAGCAGATCCGCGGGGAGATCGACAGCCTGCGCCAGGAGAAGGACTCGTGCTC  
 AAGCAGCGCTTGAGATCGACGCAAGCTGAGGCGAGGGAGTCTGCTGTCCCCCAGGAGGAGCGGAG  
 GCTGTTCCAGTTGGATGAGGCCATCGAGGCCCTGGATGCTGCCATTGAGTATAAGAAATGAGGCCATCA  
 CATGCCGCCAGCGGGTGCTTCGGGCCCTCAGCCTCGTTGCTGTCCAGTGCGAGATGAACCTCATGGCC  
 AAGCTCAGCTACCTCTCATCCTCAGAGACCAGAGCCCTCTCTGCAAGTATTTTGACAAGGTGGTGAG  
 CACTCGGAGGAGCAGCACCAGCAGCAGATTCGCTTCTCGAACTGGAGATGAGCTGGAGGAGCAG  
 AGAGGCTGGTGTACTGGCTGGAGGTGGCCCTGGAGCGGCAGCGCTGGAGATGGACCGCCAGCTGACC  
 CTGCAGCAGAAGGAGCACGAGCAGAACTGCAGCTGCTCTCGCAGCAGAGTCGAGACCCTCGGTGA  
 AGGGTTAGCAGACAGCAGGAGGAGTATGAGGCCCGGATTCAGCTCTGGAGAAGGAACTGGGCGGT  
 ACATGTGGATAAACACGGAACCTGAACAGAAAGCTCGGCGGTGTGAACGCTGTAGGCCACAGCAGGGGT  
 GGGGAGAAGAGGAGCTGTGCTCGGAGGGCAGACAGGCTCCTGGAAATGAAGATGAGCTCCACCTGGC  
 ACCGAGCTTCTCTGCTGTGCCCCCTCACTGAGGGGGCCCCCGCAGCCGGGAGGAGCAGCGGGACT  
 TGTGTCACGCTCGGTTACCTTGACCTGGAACCGCTCAGAGCTGTGTGGTGAGGAGCAGGGGTCCCC  
 GAGGAACCTGAGGCAGGCGAGGCGGCTGAGCCCTGGTGGGCGGGTGCTTCTGTGGGTGAGGCAGG  
 CCTGCCCTGGAACCTTTGGGCCCTTTGTCAAGCCCGCGGGGAAGTGCAGCAGCCAGCCCGGGATGA  
 TTGATGTGCGGAAAAACCCCTGTAAAGCCCTCGGGGCGAGACCTGCTTGGAGGAGAGACTCGAGCAGCT  
 GCTGAAAGGGGAGCTGCTGCTGTTTGTCTTCTGTGAAGGCGAGTCTTACCAGCACCCCTAAATCCAGC  
 CCTCATCTGTACCTCACTGGGATCAACAAATTTGGGCCATGGCCCAAAAGAACTGGACCCTCATTT  
 AACAAAAATATGCAAAATCCCAACACTTACTTCCATGAAGCTGTGGTATCCCAATTCGCGCCTTGTG  
 TCTGTCTGAATCTCAGGACAATCTGGTTTCAGGCGTAAATGGATGTGCTTGTAGTTGAGGGGTTTG  
 GCCAAGAAATCATCACGAAAGGTCGGTGGCAACAGGTTGTGGTTTAAATGGTCTTATGTATATAGGG  
 GAAACTGGGAGACTTTAGGATCTTAAAAACCATTTAATAAAAAAAATCTTTGAAGGGAC

## FIGURE 4

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</usr/seqdb2/sst/DNA/Dnaseqs.min/ss.DNA47465
<subunit 1 of 1, 830 aa, 1 stop
<MW: 95029, pI: 8.26, NX(S/T): 2
MEQYKLGSDRLREQQEBMVELRLRLVLRPGWGGLRLLNGLPPGSFVVRPHTAPLGGAAHV
LGMVFPACLPFGEVSGSEQRGEQVTNGREAGAELLTEVNRLGSGSSAASEEEEEEEPPRRTL
HLRRNRISNCSQRAGARPGSLPERKGPELCEELDAAIPGSRVGGSKARVQARQVPPATAS
EWRLAQAQKIRELA INIRMKEELIGELVRTGKAAQALNRQHSQRIRELEQEAQVRAELSE
GQRQLRELEGKELQDAGERSRLQEFRRRVAAAQSQVQLKEKKQATERLVLSLSAQSEKRLQE
LERNVQLMRQQQGQLQRRLEETEQRRLLEAEMSKRQHRVKELELKHEQQQKILKIKTEEIA
AFQKRRSGSNGSVVLSLEQQQKIEEQKKWLDQEMEKVLQQRRALEELGEELHKREAILAKKE
ALMQEKTGLESKRRLRSSQALNEDIVRVSSRLEHLEKELSEKSGQLRQSSAQSQQQIRGEIDS
LRQEKDSLKQRLIDGKLRQGSLLSPBEERTLQFQLEAIEALDAAIEYKNEAITCRQVRVR
ASASLLSQCEMNLMAKLSYLSSETRAILLCKYFDKVVTLREEHQHQQIAFSELEMQLEEQQR
LVVWLEVALERQRLQLEMDRQLTLQKKEHEQNMQLLLQSSRDHLGEGGLADSRQYEARIQALEK
ELGRYMWINQELKQKLGGVNAVGHSSRGGEKRSLSCEGRQAPGNEDELHLAPELLWLSPLTEG
APRTREETRDVLVHAPLPLTWKRSSLCGEEQGSPEELRQREAAEPLVGRVLRPVGEAGLPWNFG
PLSKPRRELRRASPGMIDVRKNPL
```

### Important features:

Leucine zipper pattern.

amino acids 557-579, 794-815

### N-glycosylation sites.

amino acids 133-136, 383-386

### Kinesin related protein Kif-4 Coiled-coil domain:

amino acids 231-672

## FIGURE 5

ATTCTCCTAGAGCATCTTTGGAAGCATGAGGCCACGATGCTGCATCTTGGCTCTTGTCTGTCT  
GGATAACAGTCTTCCTCCTCCAGTGTTCAAAAGGAACTACAGACGCTCCTGTTGGCTCAGGA  
CTGTGGCTGTGCCAGCCGACACCCAGGTGTGGGAACAAGATCTACAACCTTCAGAGCAGTG  
CTGTTATGATGATGCCATCTTATCCTTAAAGGAGACCCGCCGCTGTGGCTCCACCTGCACCT  
TCTGGCCCTGCTTTGAGCTCTGCTGTCCCGAGTCTTTTGGCCCCCAGCAGAAAGTTTCTTGTG  
AAGTTGAGGGTTCTGGGTATGAAGTCTCAGTGTCACTTATCTCCCATCTCCCGGAGCTGTAC  
CAGGAACAGGAGGCACGTCTGTACCCATTAAAAACCCAGGCTCCACTGGCAGACGGCAGAC  
AAGGGGAGAAGAGACGAAGCAGCTGGACATCGGAGACTACAGTTGAACCTCGGAGAGAAGCA  
ACTTGACTTCAGAGGGATGGCTCAATGACATAGCTTTGGAGAGGAGCCCAGCTGGGGATGGC  
CAGACTTCAGGGGAAGAATGCCTTCCTGCTTCATCCCCCTTCCAGCTCCCCCTCCCGCTGAG  
AGCCACTTTCATCGGCAATAAAATCCCCACATTTACCATCT

100  
90  
80  
70  
60  
50  
40  
30  
20  
10  
0

## **FIGURE 6**

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></usr/seqdb2/sst/DNA/Dnaseqs.full/ss.DNA57700
><subunit 1 of 1, 125 aa, 1 stop
><MW: 14198, pI: 9.01, NX(S/T): 1
MRPRCCILALVCWITVFLQCSKGTTDAPVGSGLWLCQPTPRCGNKIYNPSEQCCYDDAILS
LKETRRCGSTCTFWPCFELCCPESFGPQQKFLVKLRVLGMKSQCHLSPISRSCTRNRRHVLYP
```

### **Important features:**

#### **Signal sequence**

amino acids 1-21

#### **N-myristoylation sites.**

amino acids 33-39, 70-76

## FIGURE 7

CCCACGCGTCCGCCCCACGCGTCCGGGTGCCACTCGCGCGCCGGCCGCGCTCCGGGCTTCTCT  
 TTTCCCTCCGACGCGCCACGGCTGCCCCAGACATTCCGGCTGCCGGGTCTGGAGAGCTCCCCG  
 AACCCCTCCGCGGAGAGGAGCGAGGCGGCGCCAGGGTGGCCCCGGGGCGCGCTTGGTCTCG  
 GAGAAGCGGGGACGAGGCGCGAGGATGAGCGACTGAGGGCGACGCGGGCACTGACGCGAGTT  
 GGGGCCGCGACTACCGGCAGCTGACAGCGCGATGAGCGACTCCCCAGAGACGCCCTAGCCCG  
 GTGTGCGCGCCAGGCGGAGCGCGCAGGTGGGGCTGGGCTGTAGTGGTCCGCCCCACGCGGG  
 TCGCGCGCCGGCCAGGATGGGCGCTGGCAACCGGGCCCGCGCCCGCGCTGCTACCCCTG  
 CGCCCGCTGCGAGCCCGGCGCTCCGGCCCGCGCCCTGCGCTCATGGACGGCGGCTCCCGGCTG  
 GCGGCGGCGCGCCCCGGGCTGTGAATGCGACTCGCCCCCTGGCGCGCTCCCGCCCGCCC  
 GCCC CGGGACGTGGTAGGGGATGCCCCAGCTCCACTGCGATGGCAGTTGGCGCGCTCTCCA  
 GTTCCCTCTGTACCTGCTGCGCTGATGGTGGCTCTGTGCAGTCCGAGCATCCCGCTGGAG  
 AAGCTGGCCAGGCACCCAGAGCAGCCGGGCCAGGAGAAGCGTGAGCACGCCACTCGGGACGG  
 CCGGGGCGGGTGAACGAGCTCGGGCGCCCGCGAGGGACGAGGGCGGCAGCGGCCGGGACT  
 GGAAGAGCAAGAGCGGCCGTGGGCTCGCCGGCCGTGAGCCGTGGAGCAAGCTGAAGCAGGCC  
 TGGGTCTCCAGGGCGGGGGCGCCAAGGCCGGGGATCTGCAAGTCCGGCCCCCGGGGACAC  
 CCGCAGGCGGAAGCCCTGGCCGAGCCGCCAGGACGCGATTGGCCCGGAACCTCGCGCCCA  
 CGCCCGAGCCACCCGAGGAGTACGTGTACCCGACTACCGTGGCAAGGGCTGCGTGGACGAG  
 AGCGGCTTCGTGTACGCGATCGGGGAGAAGTTGCGCGCGGGCCCCCTCGGCTGCCCGTGCTT  
 GTGCACCGAGGAGGGGCGCTGTGCGCGCAGCCGAGTGCCCGAGGCTGCACCCGCGCTGCA  
 TCCACGTGACACGAGCCAGTGCTGCCCGAGTGCAAGGAGAGGAAGAACTACTGCGAGTTT  
 CGGGGCAAGACCTATCAGACTTTGGAGGAGTTCTGGTGTCTCCATGCGAGAGGTGTCGCTG  
 TGAAGCCAAACGGTGAGGTGCTATGCACAGTGTGAGCGTGTCCCAGACGGAGTGTGTGGACC  
 CTGTGTACGAGCCTGATCAGTGCTGTCCCATCTGCAAAAAATGGTCCAAACTGCTTTGAGAA  
 ACCGCGGTGATCCCTGCTGGCAGAGAAGTGAAGACTGACGAGTGACCATATGCCACTGTAC  
 TTATGAGGAAGGCACATGGAGAATCGAGCGGCAGGCCATGTGCACGAGACATGAATGCAGGC  
AAATGTAGACGCTTCCAGAACACAACTCTGACTTTTTCTAGAACATTTTACTGATGTGAA  
 CATTTCTAGATGACTCTGGGAACATCAGTCAAAGAAGACTTTTGATGAGGAATAATGAAAAA  
 TTGTTGGTACTTTTCTTTTCTTGATAACAGTTACTACAACAGAAGGAAATGGATATATTTT  
 AAAACATCAACAAGAACTTTGGGCATAAAATCCTTCTCTAAATAAATGTGCTATTTTACAG  
 TAAGTACACAAAAGTACACTATTATATATCAAAATGTATTTCTATAATCCCTCCATTAGAGAG  
 CTTATATAAGTGTTTTCTATAGATGCAGATTAAAAATGCTGTGTGTCAACCGTCAAAAAAA  
 AAAAAAAAAAAAAAAAAA

## **FIGURE 8**

```
></usr/seqdb2/sst/DNA/Dnaseqs.min/ss.DNA68818
><subunit 1 of 1, 325 aa, 1 stop
><MW: 35296, pI: 5.37, NX(S/T): 0
MPSSTAMAVGALSSSLVTCCLMVALCSFSPISPLEKLAQAPQPGQEKREHATRDGPGRVNEL
GRPARDEGGSGRDWKS KSGRGLAGREPWSKLKQAWVSQGGGAKAGDLQVRPRGDT PQAEALA
AAQDAIGFELAPTPEPPPEEYVYPDYRGKGCVDSESGFVYAIGKEKFAPGPSACPLCTEEGPL
CAQPECPR LHPRCIHVDTSQCCPQCKERNKYCEFRGKTYQTLEEFVVS PCERCRC EANGEVL
CTVSACPQTECVDVPVYEPDQCCPICKNGPNCFAETAVIPAGREVKTDECTICHCTYEETWR
IERQAMCTRHECRQM
```

**Important features of the protein:**

**Signal peptide:**

amino acids 1-27

**Transmembrane domain:**

amino acids 11-30

**Glycosaminoglycan attachment site.**

amino acids 80-83

**N-myristoylation sites.**

amino acids 10-15, 102-107, 103-108

**Cell attachment sequence.**

amino acids 114-117

**EGF-like domain cysteine pattern signature.**

amino acids 176-187



## FIGURE 9

CAGCCACAGACGGGTCATGAGCGCGTATTACTGCTGGCCCTCCTGGGGTTCATCCTCCAC  
TGCCAGGAGTGCAGGCGCTGCTCTGCCAGTTTGGGACAGTTCAGCATGTGTGGAAGGTGTCC  
GACCTACCCCGCAATGAGACCCCTAAGAACACCAGCTGCGACAGCGGCTTGGGGTGCCAGGA  
CACGTTGATGCTCATTTAGAGCGGACCCCAAGTGAGCCTGGTGTCTCCAAGGGCTGCACGG  
AGGCCAAGGACCAGGAGCCCCGCGTCACTGAGCACCGGATGGGCCCCGGCCTCTCCCTGATC  
TCCTACACCTTCGTGTGCCGCCAGGAGGACTTCTGCAACAACCTCGTTAACTCCCTCCCGCT  
TTGGGCCCCACAGCCCCAGCAGACCCAGGATCCTTGAGGTGCCAGTCTGCTTGTCTATGG  
AAGGCTGTCTGGAGGGGACAACAGAAGAGATCTGCCCAAGGGGACCACACACTGTTATGAT  
GGCCTCCTCAGGCTCAGGGGAGGAGGCATCTTCTCCAATCTGAGAGTCCAGGATGCATGCC  
CCAGCCAGGTGTC AACCTGCTCAATGGGACACAGGAAATGGGCCCCGTGGGTATGACTGAGA  
ACTGCAATAGGAAAGATTTTCTGACCTGTCTATCGGGGGACCACCATTTATGACACACGGAAC  
TTGGCTCAAGAACCCACTGATTGGACCACATCGAATACCGAGATGTGCGAGGTGGGGCAGGT  
GTGTCAGGAGACGCTGCTGCTCATAGATGTAGGACTCACATCAACCCTGGTGGGGACAAAAG  
GCTGCAGCACTGTTGGGGCTCAAAATTTCCAGAAGACCACATCCACTCAGCCCCCTCTGGG  
GTGCTTGTCGCCCTCTATACCCACTTCTGCTCCTCGGACCTGTGCAATAGTGCCAGCAGCAG  
CAGCGTTCTGCTGAACCTCCCTCCCTCCTCAAGCTGCCCCCTGTCCAGGAGACCGGCAGTGTC  
CTACCTGTGTGCAGCCCCCTTGGAACTGTTCAAGTGCGTCCCCCGAATGACCTGCCCCAGG  
GGGCCACTCATTTGTTATGATGGGTACATTCATCTCTCAGGAGGTGGGCTGTCCACCAAAAT  
GAGCATTAGGGCTGCGTGGCCCAACCTTCCAGCTTCTTGTGAAACACACAGACAAATCG  
GGATCTTCTCTGCGCGTGAGAAGCGTGATGTGCAGCCTCCTGCCCTCTCAGCATGAGGGAGGT  
GGGGCTGAGGGCCTGGAGTCTCTCACTTGGGGGGTGGGGCTGGCACTGCCCCAGCGCTGTG  
GTGGGGAGTGGTTTGCCCTTCTCTGCTTAACTCTATTACCCCCACGATTCTTACCCTGCTGA  
CCACCCACACTCAACCTCCCTCTGACCTCATAACCTAATGGCCTTGACACACAGATTCTTTC  
CCATTCTGTCCATGAATCATCTTCCCCACACAATCATTCATATCTACTCACCTAACAGCA  
ACACTGGGAGAGCCTGGAGCATCCGGACTTGCCCTATGGGAGAGGGGACGCTGGAGGAGTG  
GCTGCATGTATCTGATAATACAGACCTGTCCTTTCA

## FIGURE 10

```
></usr/seqdb2/sst/DNA/Dnaseqs.min/ss.DNA59847
><subunit 1 of 1, 437 aa, 1 stop
><MW: 46363, pI: 6.22, NX(S/T): 3
MSAVLLLLALLGFILPLPGVQALLCQFGTVQHVWVSDLPQWTPKNTSCDSGLGCQDTLMLI
ESGPQVSLVLSKGCTEAKDQEPVTEHRMGPGLSLSYTFVCRQEDFCNNLVNSLPLWAPQP
PADPGSLRCPVCLSMEGCLEGTTEEICPKGTTHCYDGLLRGGGIFSNLRVQGCMPPQGCN
LLNGTQEIGPVGMTENCNRKDFLTCHRGTTIMTHGNLAQEPTDWTSTNTEMCEVGQVCQETL
LLIDVGLTSTLVGTCGSTVGAQNSQKTTIHSAPPGVLVASYTHFCSSDLNCNSASSSSVLLN
SLPPQAAPVPGDRQCPTCVQPLGTCSSGSPRMTCPRGATHCYDGYIHLSGGGLSTKMSIQGC
VAQPSSFLLNHRQIGIFSAREKRDVQPPASQHEGGGAEGLESITWGVGLALAPALWWGVVCPSC
```

**Important features of the protein:**

**Signal peptide:**

amino acids 1-15

**Transmembrane domain:**

amino acids 243-260

**N-glycosylation sites.**

amino acids 46-49, 189-192, 382-385

**Glycosaminoglycan attachment sites.**

amino acids 51-54, 359-362

**N-myristoylation sites.**

amino acids 54-59, 75-80, 141-146, 154-159, 168-173, 169-174,  
198-203, 254-259, 261-266, 269-274, 284-289, 333-338, 347-352,  
360-365, 361-366, 388-393, 408-413, 419-424

## FIGURE 11

CGACGATGCTACGCGCGCCCGGCTGCCTCCTCCGGACCTCCGTAGCGCCTGCCGCGGCCCTG  
GCTGCGGGCGTGCTCTCGTCGCTTGCGCGCTGCTCTCTTCTAGAGCCGAGGGACCCCGGTGGC  
CTCGTCGCTCAGCCCCATTTCGGCACCAAGACTCGCTACGAGGATGTCAACCCCGTGCTAT  
TGTCGGGGCCCCGAGGCTCCGTGGCGGGACCTGAGCTGCTGGAGGGGACCTGCACCCCGGTG  
CAGCTGGTGCCTCATTTCCGCCACGGCACCCGCTACCCCAAGCTCAACACAGATCCGCAAGCT  
GAGGCAGCTGCAAGGGTTGCTGCGAGGCCGCGGGTCCAGGGATGGCGGGGCTAGTAGTACCG  
GCAGCCGCGACCTGGGTGCAGCGCTGGCCGACTGGCCCTTTGGTGTACGCGGACTGGATGGAC  
GGGCAGCTAGTAGAAGGGACGGCAGGATATGCGACAGCTGGCGCTGCGTCTGGCCCTCGCT  
CTTCCCGGCCCTTTTACGCCGTGAGAACTACGGCCGCTGCGGCTCATCACCAGTTCACAAGC  
ACCGCTGCATGGATAGCAGCGCCGCTTCTGCGAGGGGCTGTGGCAGCACTACCACCTGGC  
TTGCCCGCCCGGACGTCGCAGATATGGAGTTTGGACCTCCAACAGTTAATGATAAACTAAT  
GAGATTTTTTGATCACTGTGAGAAGTTTTTAAGTGAAGTAGAAAAAATGCTACAGCTCTTT  
ATCAGGTGGAAGCCTTCAAACTGGACCAGAAATGCAAGAACATTTTAAAAAAGTTGCAGCT  
ACTTTGCAAGTGCCAGTAAATGATTTAAATGCAGATTTAATTCAAGTAGCCTTTTTCACCTG  
TTCATTTGACCTGGCAATTAAGGTTTAAATCTCCTTGGTGTGATGTTTTTGACATAGATG  
ATGCAAGGTTATGAATATTTAAATGATCTGAAACAATATTGGAAAAGAGGATATGGGTAT  
ACTATTAAACAGTCGATCCAGCTGCACCTTGTGTTTACGATATCTTTTCAGCACTTGGACAAAGC  
AGTTGAACAGAAACAAAGGCTCAGCCAATTTCTTCTCAGTCATCCTCCAGTTTGGTCATG  
CAGAGACTCTTCTCCACTGCTTTCTCTCATGGGCTACTTCAAAGCAAGGAACCCCTAACA  
CGGTACAATTACAAAAACAAATGCATCGGAAGTTCGGAAGTGGTCTCATTTGATCACTTATGC  
CTCGAACCTGATATTTGTGCTTTACCACTGTGAAAATGCTAAGACTCCTAAAGAACAAATCC  
GAGTGCAGATGTTATTTAAATGAAAAGGTTTACCTTTGGCTTACTCACAGAAACTGTTTCA  
TTTTATGAAGATCTGAAGAACCCTACAAGGACATCCTTCAGAGTTGTCAAACCAAGTGAAGA  
ATGTGAATTAGCAAGGGCTAACAGTACATCTGATGAACATGAGTAAGTGAAGAACATTTTT  
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ACAGGAAGCTTTTATATTACTTGAGTATTTCTGTCTTTTCACAGAAAAACATTTGGGTTTCTC  
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ACAAATCTATTAGAGAAACAGCTGGCCCTGCAAAATGTTTACAGAAATGAAATTTCTTCTAC  
TTATATAAGAAATCTCACACTGAGATAGAATTGTGATTTTCAATAAACACTTGAAAAGTGCT  
GGAGTAACAAAAATCTCAGTTGGACCATCCTTAACTTGATTGAACCTGTCTAGGAACCTTAC  
AGATTGTTCTGCAGTTCTCTCTCTTTTCTCCTCAGGTAGGACAGCTCTAGCATTTTCTTAATC  
AGGAATATTGTGGTAAGCTGGGAGTATCACTCTGGAAGAAAGTAACATCTCCAGATGAGAAT  
TTGAAACAAGAAACAGAGTGTGTGTAAGGACACCTTCACTGAAGCAAGTCGGAAGTACAA  
TGAAAAATAAATATTTTGGTATTTATTTATGAAATATTTGAACATTTTTCATAAATTCCTT  
TTTACTTCTAGGAAGTCTCAAAGACCATCTTAAATATTATATGTATTTGGACAAATTAGCAAC  
AAGTCAGATAGTTAGAACTGAGTGTGTAAGGAGTGTGTAAGGAGTGTGTAAGGAGTGTGTAAG  
CACTTGGCTTCGATTTTTATATTTTCTATTTATATGAAATGTATCTTTGGTGTGTTGATTT  
TTCTTTCTTTCTTTGTAAATAGTTCTGAGTTCTGTCAAATGCCGTGAAAGTATTTGCTATAA  
TAAAGAAATCTTTGTGACTTTAAAAA

## **FIGURE 12**

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></usr/seqdb2/sst/DNA/Dnaseqs.min/ss.DNA76400
><subunit 1 of 1, 487 aa, 1 stop
><MW: 55051, pI: 8.14, NX(S/T): 2
MLRAPGCLLRTSVAPAAALAAALLSSLARCSLLEPRDPVASSLSPYFGTKTRYEDVNPVLLS
GPEAPWRDPELLEGTCTPVQLVALIRHGTRYPTVKQIRKLRQLHGLLQARGSRDGGASSTGS
RDLGAALADWPLWYADWMDGQLVEKGRQDMRQLALRLASLFPALFSRENYGRRLRITSSKHR
CMDSSAAFLQGLWQHYHPGLPPPDVADMEFGPPTVNDKLMRFFDHCEKFLTEVEKNATALYH
VEAFKTPGPEMQNILKKVAATLQVPVNDLNADLIQVAFFTCSFDLAIKGVKSPWCDVFDIDDA
KVLEYLNDLKQYWKRGYGYTINSRSSCTLFQDIFQHLDKAVEQKQRSQPISSPVILQFGHAE
TLLPLLSLMGYFKDKEPLTAYNYKKQMHRKFRSGLIVPYASNLIFVLYHCENAKTPKEQFRV
QMLLNEKVLPLAYSQETVSFYEDLKNHYKDILQSCQTSEECELARANSTSDEL
```

### **Important features:**

#### **Signal sequence**

amino acids 1-30

#### **N-glycosylation sites.**

amino acids 242-246, 481-485

#### **N-myristoylation sites.**

amino acids 107-113, 113-119, 117-123, 118-124, 128-134

#### **Endoplasmic reticulum targeting sequence.**

amino acids 484-489

## FIGURE 13

GGGACTACAAGCCGCGCGCGCTGCCCTGGCCCCCTCAGCAACCCCTCGACATGGCGCTGAGCGGGCCACCGCGAC  
TCCGGCTCTGCGGCTCGGCTGCGTGACTTCTTCCGTGCTGCTGCTTTTCAGGGGCTGCGCTGATAGGGGCTGTAAATC  
TCAAATCCAGCAATCGAACCCAGTGGTACAGGAATTTGAAAGTGTGGAACGTGCTTGCATCATTACGGATTCCG  
AGACAAGTGACCCAGGATCGATGGAGAAAAATCAAGATGAACAAACCATATGTGTTTTTGCACAAACAAA  
TTCAGGAGACTTGGCGGGTCTGTCAGAAATCTGGGGAAGACATCCCTGAAGATCTGGAATGTGACAGCGAGG  
ACTCAGCCCTTATTCGCTGTGAGGTGCTTGTCTGAAATGACCGCAAGGAAATGTAGTAGATTGTGATCGAGTTAA  
CTGTGCAAGTGAAGCCAGTGAACCCCTGCTGTGTAGAGTGCCGAAGGCTGTACCATGTAGGCAAGATGGCAACACTGC  
ACTGCCAGGAGAGTGAAGGGCCACCCCGGCTCACTACAGCTGGTATCGCAATGATGTACCCTGCCACGGATT  
CCAGAGCCAATCCAGATTTTCGAATCTTCTTCCACTTAAACTTGAAACAGGCACCTTTGGTGTTCACTGCTG  
TTCACAGGAGCACTCTGGGCGAGTACTTGCATTGCTTCCAATGACGCGAGCTCAGCCAGGTGTGAGGAGCAGG  
AGATGGAAGTCTATGACCTGAACATTGGCGGAATATTGGGGGGGTTCTGGTGTCTTGTGCTGTAAGTGGCCCTGA  
TCAGTTGGGCATCTGCTGTGCATACAGACGTGGCTACTTTCATCAACAATAAACAGGATGGAGAAAGTTTACAGA  
ACCCAGGGAACCCAGATGGAGTTTAACTACATCCGCACTGACGAGGAGGGCGACTTCAGACACAAGTCATCGTTTG  
TGATCTGAACCCCGGTGTGGCTGAGAGCGCACAGAGCGCACGTGCACATACCTCTGTAGAAAATCTCTGTCAA  
GGCAGCAGAGCTGATGCATCGGTCAGGCTAGACACTCAITCAGAAGCTTTCCGTTTTGGCCAAAAGTTGACCA  
CTACTCTTCTTACTCTCAACCAACCATGTAATAAGAAATTTTCTCAAGATGAGCCGGTAAATATAACCAAA  
GGAAGCGAACTGGGTGCTGCTAGATTGGGTTCCCTAATCTGTTTCTGGCCTGATTCCCGCATAGATATTAGG  
GTGATCTTAAAGATTGTGCTACGTCAAAACCGCGTCTGGCCCTGTGAAGCCAGCATGTTCCACCCTGGTGGT  
CAGCAGCCACGACAGACCAATGTAGATGTGGCAGGTGTGCTGGACAGCACCAGCAGCGCATCCCGCGGGAAACCA  
GAAAGGCTTCTTACACAGCAGCCTTACTTTCATCGGCCACACAGACCAACCGAGTTTCTCTTAAAGGCTCTGC  
TGATCGGTGTTGCAGTGTCCATTGTGGAGAAGCTTTTGGATCAGCATTTTGTGAAAAAACCAAAAATCAGGAAG  
GTAAATTTGGTGTGGAAGAGGATCTTGGCTGAGGAACCTGCTTGTCCACAGGGTGTACAGATTAAAGAAA  
ACCTTCGTCTAGGCTAAGTCTGAAATGGTACTGAAATATGCTTTTCTATGGGTCTGTGTTATTTTATAAAATTT  
TACATCTAAATTTTGTCTAAGGATGTATTTTGATTATTGAAAGAAAAATTTCTATTAAACCTGTAATATATTGT  
CATACATATGTTAAATAACCTATTTTTTTTAAAAAAGTTCAACTTAAGGTAGAAGTTCCAAGCTACTAGTGTAAAT  
TGGAAAAATATCAATAATTAAAGATTTTTTACCACAGGAATCCTCTCATGGAAGTTTATCTGTGATGTCTCTTTTCT  
CACACAAGTTTAGCCTTTTTTCAAGGGAACTCATACTGTCTACACATCAGACCATAGTTGCTTAGGAAACCTT  
TAAAAATCCAGTTAAGCAATGTTGAAATCAGTTTGCATCTCTTCAAAAGAAACCTCTCAGGTAGCTTTGAAT  
GCCCTCTTCTGAGATGACTAGGACAGCTGTACCCAGAGGCCACCCAGAAGCCTCAGATGTACATACACAGATG  
CCAGTCAGCTCTGGGGTGTGCGCAGGCGCCCCCGCTCTAGCTCACTGTGCTCTGCTGTGCCAGGAGGCCCT  
GCCATCTCTGGGCCCTGGCAGTGGCTGTGCTCCAGTGAGCTTTACTCAGTGGCCCTTGCTTCATCCAGCACAGC  
TCTCAGTGGGCAGTGCAGGGAAGTGGTGTCTTCCATGTAGCGTCCAGCTTTGGGCTCCTGTAACAGACTCT  
TTTTGGTTATGGATGGCTCACAAAATAGGGCCCCCAATGCTATTTTTTTTTTAAAGTTTGTTTAATATTGTT  
AAGATTGTATAGGCCCCAAGGCAATTGCGAAATCAAGTCTGCAAGTACAATAACATTTTTTAAAGAAAAATGGAT  
CCCCTGTTCTCTTTTGGCCACAGAGAAGCACCAGCGCCACAGGCTCTGTGCTGATTTCAAAACAAACCATGGA  
GGATGGCGGCCAGTCCAGCCTTTTTAAAGAACGTGAGTGGAGCAGCCAGTGAAGGCTGTGCGGGGAGGAAG  
TGAAAGCCCTGAATCAAAAGCAGTTTTCTAATTTTGACTTTAAATTTTTTATCCCGCGGAGACACTGCTCCATT  
TGTGGGGGACATTAGCAACATCAGCTCAGAAAGCCTGTGTTCTTCAAGAGCAGGTGTTCTCAGCCTCACATGCGCT  
GCGTGTGCGGACTCAGACTGAAGTGTCTTAAAGCAGGAGCTGTGAGAGGAGCACTCACTGTGTGCTGCTGGA  
GAATGGCTCTCACTACTCACTTGTCTTTCAGCTTCCAGTGTCTTGGGTTTTTATATCTTTCAGCAGCTTTTTT  
AATGTCATCATGTAGACTGTGTTGACTTTTTTGTATTGTGAAACACTTTGCGCCGAGTACGAGGCTGCGCAGAGCA  
GGAATGCTCTCAGCAGTGGCTCAGTGCTCCTGGTGTCTGCTGCATGGCATCTGGATGCTTAGCATGCAAGTTC  
CCTCCATCATTGGCCACTTGGTAGAGAGGATGGCTCCCCACCTCAGCGTTGGGGATTACAGCTCCAGGCTCTCT  
TCTTGGTGTGCTAGTGAAGGTAGCCTTATTGCCCCCTCTTCTTATACCTAGGAACCTCTCACACTAGTGCACA  
TGGGAACCAAGTCTGAAAGAGTAGAGAGAAGTGAAGTAGAGTCTGGGAAGTAGTGTGCTATACCTAGACACTAGA  
CGGAAGAGGAATATCTGCTGATTTTAAAGATGAATGTACTCAAGACTGCGGCGGATACGAGGCTGTGATTCT  
GCCTTTGGATGGATGTTGCTGTACACAGATGCTACAGACTGTGACTAACACACCGTAATTTGGCATTTGTTTAAAC  
CTCATTTATAAAGCTTCAAAAAAACCA

## **FIGURE 14**

```
></usr/seqdb2/sst/DNA/Dnaseqs.min/ss.DNA77624
><subunit 1 of 1, 310 aa, 1 stop
><MW: 35020, pI: 7.90, NX(S/T): 3
MALRRPRLRLCARLPDFFLLLLFRGCLIGAVNLKSSNRTFVVQEFESVELSCIITDSQTS
PRIEWKKIQDEQTTYVFFDNKIQGDLAGRAEILGKTSLKIWNVTRRDSALYRCEVVARND
EIDEIVIELTVQKVPVTPVCRVPKAVPVGKMATLHCQESEGHPRPHYSWYRNDVPLPTDS
RA NPRFRNSSFHLNSETGTLVFTAVHKDDSGQYYCIASNDAGSARCEEQEMEVDLNI
GGIIGG
VLVVLAVLALITLGICAYRRGYFINNKQDGESYKNPGKPDGVNYIRTDEEGDFRHKSSF
VI
```

### **Important features of the protein:**

#### **Signal peptide:**

amino acids 1-30

#### **Transmembrane domain:**

amino acids 243-263

#### **N-glycosylation sites.**

amino acids 104-107, 192-195

#### **cAMP- and cGMP-dependent protein kinase phosphorylation site.**

amino acids 107-110

#### **Casein kinase II phosphorylation site.**

amino acids 106-109, 296-299

#### **Tyrosine kinase phosphorylation site.**

amino acids 69-77

#### **N-myristoylation sites.**

amino acids 26-31, 215-220, 226-231, 243-248, 244-249, 262-267

# FIGURE 15

CAGGACCAGGTCTTCTACGCTGGAGCAGCGGGAGACAGCCACCATGCACATCTCTGTTGGTCCATGCCATGGTG  
 ATCTGCTGACGCTGGGCCCGCTCGAGCCGACGACAGCGAGTTCCAGGCGCTGCTGGACATCTGGTTTCCGGAG  
 GAGAAGCCACTGCCACCAGCCTTCTCGTGGACACATCGGAGGAGGCGCTGCTGCTTCTGACTGGCTGAAGCTG  
 CGCATGATCCGTTCTGAGGTGCTCCGCCCTGGTGGACGCCGCCCTGCAGGAGCTGGAGCCGACGAGCTGCTGCTG  
 TTCGTGACGCTGTTTGGCATCCCGTGTCCAGCATGAGCAAACTCCTCCAGTTCTCTGGACACGCGATGGCCAC  
 GACCCCACAGCTCTGGAGACAGACATCATGGACAAGATTACATGGCCACCTGGTGGAGGTCCAGCATGAGCGC  
 GGCGCTCTCGGAGGCGAGACTTTCACCTCTGCTCAGACCTCCTCTGCCGCCGCCGAGACACGACATGACCA  
 CCCAAACAAAGAGCAGCCACGAGCAGCCATAGGCCAGGGCCGGATTCCGGTGGGACCCAGCTTCGGGTGCTG  
 GGCCTTGAGGACGACCTGGCTGGCATGTTCTCTCAGATTTCCTCCGCTCAGCCCGGACCCCTCGGTGGCAGAGCTCC  
 AGTCCCCCGCCCGTGGCCCTCGCCCTGCAGCAGGCCCTGGGCCAGGAGCTGGCCCCGCTCGTTCAGGGCAGCCCC  
 GAGGTGCCGGGCATCAGGTGCGGTCTCTGCAGGCCCTCGCCACCTGCTCAGCTCCCCACACGGCGGTGCCCTG  
 GTGATGTCCATGACCCGTAGCCACTTCTGGCCTGCCCGCTGCTGCGCCAGCTCTGCCAGTACCAGCGCTGTGTG  
 CCACAGGACACCGGCTTCTCTCGCTCTTCTGAAGGTGCTCTGCAGATGCTCAGTGGCTGGACAGCCCTGGC  
 GTGGAGGGCGGGCCCTGCGGGCAGCAGCTCAGGATGCTTGGCAGCCAGGCCCTCAGCCGGCGCAGGCTCAGTGAT  
 GTGCGAGGGGGGCTCTGCGCCTGGCCAGGGCCCTGGCCCTCCGTGAGGAGTGGTTCAGCTCCACCGTCTG  
 CGTCCGCTCATCGCCACCTTGAGCTCTGGGAGCAGTGCAGCTGGAGCCGACCTGATCAGCAAACTCTCCAG  
 GGGCTAGTCGAGGTGAGGTCCGCTCAGCTGGAGGAGTGTGCTGACTCATTTCTCTGACCTCGGGATGCTGCC  
 TCCCGCTTTCAGCTCTGAAGCCCGTTGTGGTGGTGAAGCTCCTGCTGCTGCAGGAGGAGGAGCCCTGCTGGTGG  
 GGGAGAGCGGGTGGCAGCGTGGCAGCTGGAGGCCGTGCCGCTCTGTCAGGCTCTAGTGGCTCTAGTGGATGG  
 CTGGAATGCTGACCCCGAGGTGGTGCAGCAGTGCCTCGACCTGCAGCTCAGGCTGCTCTTCTCCCGAGGAAAG  
 GGCAAGGTTCAGGCCAGGTGCCCCCTGTTCCGTCCCTACCTCTGACCTCTTCACGATCAGTCCAGCTGGCCC  
 ACATGTCACCAAGTGATCCGAGTCTGCTGGGCAAGAGCCGGGAACAGAGTTTCGACCCCTCTGCTCTTGGAC  
 TTCTCTGGGCTGCATCCATGTTCTCTGCATCTGGCAGGGGGCGGAGCCAGCGCACCCCGCAGAGCGCGGGAG  
 GAGCTGGTGTCTCGGGTCCAGGGCCCGAGCTCATCAGCTTGGTGGAGCTGATCTTGGCCAGGCGGAGACCGCG  
 AGCCAGGACGGGACACAGCGCCCTGCAGCCTCATCCAGGCCCGGCTGCCCTGCTGCTCAGCTGCTGCTGTGGG  
 GACGATGAGAGTGTGAGGAAGGTGACGGAGCACCTGTGAGGCTGCATCCAGCAGTGGGGAGACAGCGTGTGGGA  
 AGCGCTGCGCGAGACTTCTCTGCAGCTCTACCTACAGCGCGCGAGCTGCGGGTCCCGCTGCTTGAAGTCTTA  
 CTGCACAGCGAAGGGCTGCACAGCAGCGCTCTGCAAGCTGGACGACTCATCCACGCTTTCATCAGCTCCTT  
 GCGGACACCAAGCACTCCCGGCGTTGGAGAACCGAGGGGCGGATGCCAGATGGCTTCCGGAAGCTGGCGGTG  
 GCGCACCCGCTGCTGCTGCTCAGGCACCTGCCCCATGATCGCGGCGCTCTGACAGCGCCGACCCACCTCAACTT  
 CAGGAGTTCGGGCAGCAGAACCCTGAGCTGCTTCTGCACTGCTGCGGCTGCTGAGCTGCTGACGCCGCAC  
 GTGTTCCGACGCGAGCACAGGGGGCGCTGTGGAGTGCCTTCTGCTCTTATCCGCTGCTGCTGCAATTACAGG  
 AAGTCTCTCCGCCATCTGGCTGCCCTTTCATCAACAAGTTTGTGCAAGTTCATCCATAAGTACATTACCTACAAATGCC  
 CCAGCAGCCATCTCTTCTGTCAGAAAGCAGCGACCCGCTCCACGACCTCTCTGCACAACTGACCTGGTG  
 ATGCTGAAATCCTCTTTCAGGGCTCAGCCTGCCAGCAGGGACGACAGGACCGACCGAGGCTTGGACGAAGAG  
 GGGAGGAGGAGAGCTCAGCGGCTCTTTCGCCCTGCTCAGCGCTCTCCCTGTTTCAACCCTCTGACCCGCGCGGAG  
 ATGGCCCCATACATGAACCGGCTTTCCTGGGGCCAAACGGTGGAGGATCTGCTGGAGGTTCTGAGTGACATAGAC  
 GAGATGTCCCGCGGAGACCCGAGATCTTCTGAGCTTCTCTCGACCACTGCAGCGGCTGATGAGCTCGGCGAG  
 GAGTGTTCGCGCAACCTCGCTTTCAGCTGGCCCTGCGCTCCATGCAGAACTGACCCGACATTGCGAGCGCTTCT  
 CTGCCACCTTCATGTACTGCTGGGAGCCAGGACTTGAAGTGGTGACAGCGGCCCTTCGGAACCTGCTGAG  
 TAGCTCTCTGTGTCAGAGACAGCGGCTGTGCTGCTGCTCACCAGGCTCTGCTGGGCGATGTAAGGCGAGATG  
 GACCCAGCGCGCAGATCTCCAGAGCCCTGAGGATCTGATATGAGAGCGGTGATGTGAGCTGTGGCAGCCGA  
 CCCCCTTCAAGCCCGGCGCTCCCGTCCCGGGGATCTTCAGGCAAGCCAGGAAGCGTGGGCGTTGCTG  
 TCTGTCCGAGGAGGTGAGGGCGCCAGGCCCTGAGGCCAGGCGAGCCAGGAGCAATACTCTGAGCCCTGGGAGT  
 CTCCGGGCGGCGCTGGCATAGGGGCGTTCAGCAAGCCCTCATTCACTTCTGGGCGACAGCCTGCGCGG  
 AGCGGCGGATCCCCCGGCATGGCTGGGCTGGTTTGAATGAACGACCTGAATGTCAT

## FIGURE 16

></usr/seqdb2/sst/DNA/Dnaseqs.min/ss.DNA77631

><subunit 1 of 1, 1029 aa, 1 stop

><MW: 114213, pI: 6.42, NX(S/T): 0

MHILVVHAMVILLTLGPPRADDSEFQALLDIWFPEEKPLPTAFLVDTSEALLLPDWLKLRL  
IRSEVLRLVDAALQDLEPQQLLLFVQSFGIPVSSMSKLLQFLDQAVAHDPQTLEQNIMDKNY  
MAHLVEVQHERGASGGQTFHSLLTASLPPRRDSTEAPKPKSSPEQPIGQGRIRVGTQLRVLG  
PEDDLAGMFLQIFPLSPDRWQSSSPRPVALALQQALGOELARVVQGSPEVPGITVRVLQAL  
ATLLSSPHGGALVMSMHRSHFLACPLLRLQCQYQRCVPQDTGFSSFLFKVLLQMLQWLDS PG  
VEGGPLRAQLRMLASQASAGRRLSDVRGGLRLAEALAFRQDLEVVSSTVRAVIATLRSGEQ  
CSVEPDLISKVLQGLIEVRSPHLEELLTAFFSATADAASFPACKPVVVVSSLLQEEELPLA  
GGKPGADGGSLEAVRLGPSSGLLDVLEMLDPEVVSSCPDLQLRLFLSRRKGKGQAQVPSFR  
PYLLTLFTHQSSWPTLHQCIIRVLLGKSREQRDPDSASLDFLWACIHVPRIWQGRDQRT PQKR  
REELVLRVQGPELISLVELILAEAETRSQDGDTAACSLIQARLPLLLSCCGDDESVRKVTE  
HLSGCIQQWGDSVLGRRCRDL LLQLYLQRP ELRVVPVEVLLHSEGAASSVCKLDGLIHRFI  
TLADTSDSRALENRGADASMACKRLAVAHPLLLRLHPLMIAALLHGRTHLNFQEFQQNHL  
SCFLHVLGLLELLQPHVFRSEHQGALWDCLLSFIRLLNRYKSSRHAAAFINKFVQFIHKYI  
TYNAPAAISFLQKHADPLHDLSPDNLDVMLKSLLAGLSLPSRDDRTDRGLDEEGEESSAG  
SLPLVSVSLFTPLTAAMAPYMKRLSRGQTVEDLLEVLSDIDEMSSRRRPEILSFFSTNLQRL  
MSSAECCRNLAFLASLALRSMQNSPSIAAFLPTFMICYLGSDQFVEVVQTALRNLPEYALLCQE  
HAAVLLHRAFLVGMYGQMDPSAQISEALRIILHMEAVM

**Important features:**

**Signal peptide:**

amino acids 1-16

**cAMP- and cGMP-dependent protein kinase phosphorylation sites.**

amino acids 154-158, 331-335, 616-620, 785-789, 891-895

**N-myristoylation sites.**

amino acids 91-97, 136-142, 224-230, 435-441, 439-445, 443-449,  
665-671, 698-704

**Amidation sites.**

amino acids 329-333, 634-638



**FIGURE 17**

CCGGGCCATGCAGCCTCGGCCCGGGCGCCCGCCGCGCACCCGAGGAGATGAGGGCTCCGC  
AATGGCACCTTCTCTGACGCTGCTGCTCTTCTGCCTGTGCGCCTTCTCTCGCTGTCTGGTA  
CGCGGCACTCAGCGGCCAGAAAGGCGACGTTGTGGACGTTTACCAGCGGGAGTTCCTGGCGC  
TGCGGGATCGGTGACGCGAGCTGAGCAGGAGAGCCTCAAGCGCTCCAAGGAGCTCAACCTG  
GTGCTGGACGAGATCAAGAGGGCCGTGTGAGAAAGGCGAGCGCTGCGAGACGGAGACGGCAA  
TCGCACCTGGGCGCGCTTAACAGAGGACCCCGATTGAAGCCGTGGAACGGCTCACACCGGC  
ACGTGCTGCACCTGCCACCGTCTTCCATCACCTGCCACACCTGCTGGCCAAGGAGAGCAGT  
CTGCAGCCCGCGGTGCGCGTGGGCCAGGGCCGACCCGGAGTGTCCGTGGTGATGGGCATCCC  
GAGCGTGGCGGCGAGGTGCACTCGTACCTGACTGACACTCTGCACTCGCTCATCTCCGAGC  
TGAGCCCGCAGGAGAAGGAGGACTCGGTATCGTGGTGCTGATCGCCGAGACTGACTCACAG  
TACACTTCGGCAGTGACAGAGAACATCAAGGCCTTGTTCGCCACGAGATCCATTCTGGGCT  
CCTGGAGGTCATCTCACCTCCCCCACTTCTACCTTGACTTCTCCGCCTCCGAGAGTCCT  
TTGGGACCCCAAGGAGAGAGTCAAGTGGAGGACCAACGAACCTCGATTACTGCTTCCTC  
ATGATGTACGCGCAGTCCAAGGCATCTACTACGTGCAGCTGGAGGATGACATCGTGGCCAA  
GCCCAACTACCTGAGCACCATGAAGAACTTTGCACTGCAGCAGCCTTCAGAGGACTGGATGA  
TCCTGGAGTTCCTCCAGCTGGGCTTCATTGGTAAGATGTTCAAGTCGCTGGACCTGAGCCTG  
ATTGTAGAGTTCATTCTCATGTTCTACCGGGACAAGCCCATCGACTGGCTCCTGGACCATAT  
TCTGTGGGTGAAAGTGTGCAACCCCGAGAAGGATGCGAAGCACTGTGACCGGCAGAAAGCCA  
ACCTGCGGATCCGCTTCAAACCGTCCCTTCCAGCACGTGGGCACTCACTCCTCGCTGGCT  
GGCAAGATCCAGAACTGAAGGACAAAGACTTTGGAAGCAGGCGCTGCGGAAGGAGCATGT  
GAACCCGCGCAGAGGTGAGCACGAGCCTGAAGACATACCAGCACTTCACCTTGGAGAAAG  
CCTACCTGCGCGAGGACTTCTTCTGGGCCTTCAACCTGCGCGGGGGGACTTCATCCGCTTC  
CGCTTCTTCCAACCTTAAGACTGAGCGGTTCTTCTCCGCAGTGGGAACATCGAGCACCC  
GGAGGACAAGCTCTTCAACAGTCTGTGAGAGTGCTGCCCTTCGACAACCTCAGTCAGACA  
AGGAGGCCCTGCAGGAGGGCCGACCCGCCACCTCCGGTACCTCGGAGCCCGACGGCTAC  
CTCCAGATCGGCTCCTTCTACAAGGGAGTGGCAGAGGGAGAGGTGGAACCGACTTCGCGCC  
TCTGGAAGCACTGCGCTCTCGATCCAGACGGACTCCCCTGTGTGGGTGATTCTGAGCGAGA  
TCTTCTGAAAAAGGCCGCACTAAGCTGCGGGCTTCTGAGGGTACCTGTGGCCAGCCCTGAA  
GCCACATTCTTGGGGTGTGCTCACTGCCGTCCCCGGAGGGCCAGATACGGCCCCGCCCAA  
AGGGTTCTGCCTGGCGTGGGCTTGGGCCGGCCTGGGGTCCGCCCTGGCCCGGAGGCCCTA  
GGAGCTGGTGCTGCCCCCGCCCGCGGGCCGCGGAGGAGGCAGGCGGCCCCACACTGTGCC  
TGAGGCCCGAACCCTTCGACCCCGGCTGCCCCAGTCAGGCCGTTTGAAGAGGCTTTTAC  
TTGGCGCCCGCGTCTCTGGCGGAAACACTGGAATGCATATACTACTTATGTGCTGTGTT  
TTTTATTCTTGGATACATTTGATTTTTTTCACGTAAGTCCACATATACTTCTATAAGAGCGTG  
ACTTGTAATAAAGGGTTAATGAAGAAAAA

## FIGURE 18

```
></usr/seqdb2/sst/DNA/Dnaseqs.min/ss.DNA82307
><subunit 1 of 1, 548 aa, 1 stop
><MW: 63198, pI: 8.10, NX(S/T): 4
MRLRNGTFLTLTLFCLCAFLSLSWYAALSGQKGDVVDVYQREFLALRDLHAAEQESLKRSK
ELNLVLDEIKRAVSERQALRDGDGNRTWGRLTEDPRLKPWNGSHRHVLHLPTVFHHLPHLLA
KESSLQPAVRVGQGRTGVSVMGIPSVRREVHSYLTDTLHSLISELSPQEKEDSVIVVLIAE
TDSQYTSAVTENIKALFPTEIHSGLLEVISPSPHFYPDFSRLRESFGDPKERVVRWRTKQNL
YCFLMMYAQSKGIYYVQLEDDIVAKPNYLSTMKNFALQQPSEDWMILEFSQLGFIGKMFKSL
DLSLIVEFILMFYRDKPIDWLLDHILWVKCNPEKDAKHCDRQKANLRIRFKPSLQHVGVTH
SSLACKIQKLKDKDFGKQALRKEHVNPPAEVSTSLKTYQHFTLEKAYLREDDFFWAFTPAAGD
FIRFRFFQPLRLERFFFRSGNIEHPEDKLFNTSVEVLFPDNPQSDKEALQEGRTATLRYPRS
PDGYLQIGSFYKGVAEGEVDPAFGPLEALRLSIQTDSPVVWVILSEIFLKKAD
```

### Important features:

#### Signal sequence

amino acids 1-23

#### N-glycosylation sites.

amino acids 5-9, 87-91, 103-107, 465-469

#### N-myristoylation sites.

amino acids 6-12, 136-142, 370-376, 509-515